

## Claims

- [c1] What is claimed is:
1. A method for setting an initial integrity count value for a radio bearer in a wireless communication system, the wireless communication system comprising:
    - an integrity key;
    - at least a mobile unit comprising a first integrity count value, the first integrity count value consisting of a predetermined bit length;
    - at least a 17192414 universal terrestrial radio access network 17192414 Carlos Carlos Lee 17192414 Using a lowercase title is better. (UTRAN) comprising a second integrity count value, the second integrity count value consisting of the predetermined bit length, the UTRAN coupled to the mobile unit for transmitting a control command to the mobile unit, the control command used for starting an integrity protection process for the radio bearer, the integrity protection process using the integrity key and the first and second integrity count values for verifying a transmission integrity between the mobile unit and the UTRAN;
    - the method comprising:
      - transmitting a START value from the mobile unit to the UTRAN;
      - the UTRAN sending the control command to the mobile unit, and setting the x most significant bits of the second integrity count value equal to the START value; and
      - setting the x most significant bits of the first integrity count value of the mobile unit equal to the START value last transmitted to the UTRAN in response to receiving the control command.
  - [c2] 2. The method of claim 1 wherein the control command is further used for starting a ciphering process for the radio bearer so that ciphered data is transmitted by the radio bearer between the mobile unit and the UTRAN.
  - [c3] 3. The method of claim 1 wherein a bit length of the START value is less than the predetermined bit length of the first integrity count value and the predetermined bit length of the second integrity count value.

- [c4] 4.The method of claim 1 wherein the START value is retrieved from a non-volatile memory positioned on the mobile unit.
- [c5] 5The method of claim 4 wherein the non-volatile memory is a SIM card.